AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please amend paragraph [0009] as follows:

[0009] Since the substrate processing apparatus as configured above has the detecting mechanism configured to detect the relative position to the second process chamber and the correcting mechanism configured to correct the displacement of the relative position based on the result of the detection by the detecting mechanism, it is possible to carry the substrate into the second process chamber without causing any positional displacement of the substrate. In the prior art, on the other hand, the positional displacement sometimes occurs when a substrate is transferred from a first process chamber to a second process chamber although no positional displacement occurs in the first process chamber into which the substrate is first carried since the substrate is carried ~~theretino~~thereinto after being aligned by, for example, pre-alignment or the like.

Please amend paragraph [0040] as follows:

[0040] In the transfer chamber 3, a wafer transfer mechanism 6, which is constituted of a jointed-arm robot 44, and a pre-alignment stage 7 are provided. The wafer transfer mechanism 6 takes out the wafer W from the cassette 5 to place the wafer W on the pre-alignment stage 7, and thereafter, loads the wafer W into a load lock chamber 8 disposed on a vacuum process section 4 side. The wafer transfer mechanism 6 also takes out the wafer W from the load lock chamber 8 to put it in the

cassette 5. The wafer transfer mechanism 6 is configured to be rotatable in a horizontal plane (in a .theta. direction) by a base portion 9. As shown in FIG. 2, the wafer transfer mechanism 6 is also configured to be movable up/down by an amount corresponding to the height of the cassette 5 by a motor 10. The pre-alignment stage 7 has a function of aligning the wafer W direction-wise in the horizontal plane.

Please amend paragraph [0041] as follows:

[0041] Incidentally, a 2-link jointed-arm robot 44 is adopted as the wafer transfer mechanism 6 in this embodiment, but, for example, a 1-link jointed-arm robot may be adopted according to necessary stroke.

Please amend paragraph [0043] as follows:

[0043] The vacuum process section 4 has a transfer path 12 extending linearly along the X direction in the drawing. One end of the transfer path 12 is adjacent to the transfer chamber 3. The load lock chamber 8, a CVD chamber 13, and an etching chamber 14 are arranged on one side of the transfer chamber [[12]]3 along the transfer path 12 in sequence from the transfer chamber 3 side. Further, the transfer path 12 is enclosed in a case 12a, and it is possible to bring the inside of the case 12a into a vacuum state when the pressure thereof is reduced by a not-shown vacuum pump.

Please amend paragraph [0047] as follows:

[0047] The wafer transfer mechanism 23 is linearly movable along the X direction ~~is provided~~ in the transfer path 12. The wafer transfer mechanism 23 has a stage 24

linearly movable along the X direction. The stage 24 is configured to be moved by a motor 28 along a rail 27 in the X direction. As a driving mechanism thereof, for example, a belt-driving mechanism or the like is adoptable. ~~For example~~Moreover, a 1-link, X-Y jointed-arm robot 25 is disposed as a transfer robot on the stage 24. The jointed-arm robot 25 is further configured to be rotatable in a horizontal plane (in a Θ direction) with respect to stage 24 via a base portion 26.

Please amend paragraph [0080] as follows:

[0080] ~~A cassette mounting table 202 and a transfer chamber 203 of a substrate processing apparatus 201 of this embodiment have the same configuration as the configuration of those in the above-described embodiment, and therefore, explanation of these portions will be omitted.~~ The substrate processing apparatus 201 of this embodiment includes: a cassette mounting table 202 having cassettes 205 and shutters 211; a transfer chamber 203 having a pre-alignment stage 207, a wafer transfer mechanism 206, a base portion 209 and a jointed-arm robot 210; and a vacuum process section 204.

Please amend paragraph [0081] as follows:

[0081] ~~The substrate processing apparatus 201 is composed of the cassette mounting table 202, the transfer chamber 203, and a vacuum process section 204, which are arranged linearly in an X direction in the drawing.~~ Vacuum process section 204 includes a transfer path 212 enclosed in a case 212a.

Please amend paragraph [0082] as follows:

[0082] Along a transfer path 212 of the vacuum process section 204, two load lock chambers 208a, 208b, two CVD chambers 213a, 213b, two etching chambers 214a, 214b are arranged in sequence from a transfer chamber 203 side, two respective chambers facing each other. The two load lock chambers 208a, 208b are separated from transfer chamber 203 by gate valves 216a, 216b and from transfer path 212 by gate valves 316a, 316b, respectively. Load lock chambers 208a, 208b further include wafer mounting tables 215a, 215b respectively.

Please amend paragraph [0083] as follows:

[0083] The CVD chambers 213a, 213b are separated from transfer path 212 by gate valves 218a, 218b and include susceptors 217a, 217b for mounting wafers Wa, Wb respectively. The etching chambers 214a, 214b are separated from transfer path 213 by gate valves 220a, 220b and include susceptors 219a, 219b respectively. Sensors 221a and 222a are provided between a susceptor 219a and a gate valve 220a of the etching chamber 214a. Similarly, sensors 221b and 222b are provided between a susceptor 219b and a gate valve 220b of the etching chamber 214b.

Please amend paragraph [0098] as follows:

[0098] For example, the above-described first and second embodiments are configured such that the sensors are provided only in the etching chambers 14, 214a, 214b in FIG. 1 and FIG. 8. However, sensors may be provided also in the CVD

chambers 13, 213a, 213b to correct the positional displacement. In this case, it is not necessary to provide the pre-alignment stages 7, [[208]]207.

Please amend paragraph [0102] as follows:

[0102] FIG. 11 and FIG. 12 are a plane view and a side view showing another embodiment of the wafer transfer mechanism. As shown in FIG. 11, a wafer transfer mechanism 223A of this embodiment includes jointed-arm robots 225a, 225b having: a base 226; tweezers 244a, 244b capable of holding wafers; fixing members 243a, 243b; first arms 245a, 245b; a common arm 240 coupling the tweezers 244a, 244b to each other via these fixing members 243a, 243b and first arms 245a, 245b and connected to the base 266; and a motor 230 configured to drive the common arm 240, thereby driving the tweezers 244a, 244b to move back and forth synchronously. The wafer transfer mechanism 223A further includes jointed-arm robots 425a, 425b having: tweezers 444a, 444b capable of holding wafers; fixing members 443a, 443b; first arms 445a, 445b; and a common arm 440 coupling the tweezers 444a, 444b to each other via these fixing members 443a, 443b and first arms 445a, 445b and connected to the base 266 via the motor 230. The tweezers 244a, 244b, 444a, 444b are driven by the single motor 230 to move in the arrow directions respectively and they are provided adjacent to one another.

Please amend paragraph [0103] as follows:

[0103] As shown in FIG. 12, the wafer transfer mechanism 223A is constituted of two tiers of the ~~wafer transfer mechanisms 223 shown in FIG. 9A and FIG. 9B~~

~~that~~jointed-arm robots 225a, 225b and 425a, 425b, which are [[tired]]tiered in a Z axis direction. A shaft portion 230a is fixed to a rotation shaft of the motor 230, and an upper end and a lower end thereof are fixed to the common arms 440 and 240 respectively. With this structure, the shaft portion 230a is rotated in accordance with the rotation of the motor 230. The tweezers 244a, 244b and the tweezers 444a, 444b are configured to extend/contract at positions different in height in the Z direction. In the state in which the arms are contracted, the arms of the upper tier can contract similarly to the above-described embodiments, but in the arms of the lower tier, the tweezers 244a, 244b do not completely contract on the base 266 in order to avoid the interference between the shaft portion 230a and the tweezers 244a, 244b. In order to thus make the distance of back and forth movement of the tweezers different between the arms of the upper tier and the arms of the lower tier through the use of the single motor 230, for example, a gear mechanism may be provided in at least one of the pulleys A to D shown in FIG. 4 and so on or in other places. The wafer transfer mechanism 223A is substantially the same in length in the X and Y directions as and substantially double in height in the Z direction of that shown in FIG. 9A, FIG. 9B, FIG. 10A, and FIG. 10B. Moreover, as illustrated in Fig. 12, common arms 240, 440 are joined to first arms 245a(b) and 445a(b) by shaft members 241a(b) and 441a(b) respectively. Likewise, first arms 245a(b) and 445a(b) are joined to fixing members 243a(b) and 443a(b) by shaft members 242a(b) and 442a(b) respectively.

Please amend paragraph [0106] as follows:

[0106] FIG. 14 is a plane view showing a wafer transfer mechanism according to still another embodiment. A wafer transfer mechanism 223B of this embodiment includes: a base 226A whose length in an X direction is larger than that of the base 226 of the above-described embodiment; and a plurality of, for example, ~~three wafer transfer mechanism units~~three sets of jointed-arm robots 225a(b), 525a(b) and 625a(b) that are arranged on the base 226A at predetermined intervals in the X direction. The ~~wafer transfer mechanism units~~sets of jointed-arm robots respectively include: tweezers 244a(b), 544a(b), 644a(b); fixing members 243a(b), 543a(b), 643a(b); first arms 245a(b), 545a(b), 645a(b); common arms 240, 540, 640 coupling the tweezers 244a(b), 544a(b), 644a(b) via these fixing members 243a(b), 543a(b), 643a(b) and first arms 245a(b), 545a(b), 645a(b) and connected to the base [[266A]]226A; and motors 230, 530, 630 to drive the common arms 240, 540, 640. The interval in the X direction between the wafer transfer mechanism units is set to an interval such that the tweezers 244a(b), 544a(b), 644a(b) do not interfere with one another when the arms extend/contract.